IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Fabio Casati, et al.	Examiner: Ted T. Vo
Serial No.:	09/911,980	Group Art Unit: 2122
Filed:	July 24, 2001	Docket No.: 10008270-1
Title:	Modeling Tool for Electronic Services and Associated Methods	

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is filed in response to the Final Office Action mailed November 5, 2004 and the Notice of Appeal filed on March 7, 2005.

AUTHORIZATION TO DEBIT ACCOUNT

It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's deposit account no. 08-2025.

I. REAL PARTY IN INTEREST

The real party-in-interest is the assignee, Hewlett-Packard Company, a Delaware corporation, having its principal place of business in Palo Alto, California.

II. RELATED APPEALS AND INTERFERENCES

There are no known related appeals or interferences known to appellant, the appellant's legal representative, or assignee that will directly affect or be directly affected by or have a bearing on the Appeal Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1 and 3 – 38 stand finally rejected. No claims have been allowed. The final rejection of claims 1 and 3 – 38 is appealed.

IV. STATUS OF AMENDMENTS

In response to the Final Office Action, the claims were amended as follows:

(1) Independent claim 1 was amended to incorporate the recitations of dependent claim 3. In turn, claim 3 is canceled.
(2) Independent claim 29 was amended to incorporate the recitations of dependent claim 30. In turn, claim 30 was canceled, and claim 31 was amended to depend from claim 29.
(3) Independent claim 33 was amended to incorporate the recitations of dependent claim 34. In turn, claim 34 was canceled.

Applicants merely canceled claims and moved limitations from dependent claims into independent claims to place the application in a better form for appeal per 37 CFR 1.116(b)(1) and (2).

In the Advisory Action (date mailed: 02/08/2005), the Examiner refused to enter any amendments. Thus, the claims on appeal and in the following Claim Appendix correspond to the claims without the noted amendments.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The summary is set forth in six exemplary embodiments that correspond to independent claims 1, 23, 28, 29, 33, and 37. Discussions about elements and recitations of these claims can be found at least at the cited locations in the specification and drawings.

Claim 1

A model for compiling a specification of a process definition comprising:

service nodes, wherein each of said service nodes is a representation of a consumer service (see FIGS. 2 and 3, #203: p. 16, section entitled "Service nodes 203");

a first flow diagram sequencing said service nodes as a representation of the process definition (see FIGS. 2 and 3: specification starting at p. 8, line 20); and

method nodes, wherein each of said method nodes is a representation of executable operations inherent to a consumer service represented by one of said service nodes (see FIGS. 2 and 3, #205, 205': p. 17 section entitled "Method nodes 205, 205'").

Claim 23

A computer tool for compiling a specification of a process comprising:

computer code for representing a plurality of individual services as service nodes, wherein each of said service nodes is representative of a respective service invocation setup phase for each of the individual services (see FIGS. 2 and 3, #203: p. 16, section entitled "Service nodes 203"); and

computer code for compiling a set of the service nodes into a composite service forming a generically defined flow for said process (see FIGS. 2 and 3: specification starting at p. 8, line 20).

Claim 28

A computer tool for compiling a specification of a process and executing the specification of the process comprising:

computer code for representing a plurality of individual services as service nodes, wherein each of said service nodes is representative of a respective service invocation

setup phase for each of the individual services (see FIGS. 2 and 3, #203: p. 16, section entitled "Service nodes 203");

computer code for compiling a set of the service nodes into a composite service forming a generically defined flow of said process (see FIGS. 2 and 3: specification starting at p. 8, line 20);

computer code for executing the specification of the process represented by the generically defined flow by expanding each node of said set of the service nodes into method nodes, invoking functionalities of the individual services thereby, wherein each of said method nodes represent a plurality of inherent executable operations associated with a respectively associated one of the individual services (see FIGS. 2 and 3, #205, 205': p. 17 section entitled "Method nodes 205, 205'").

Claim 29

A method for structuring individual electronic services registered on an electronic service platform, the method comprising:

providing a top level having service nodes representative of extracted common elements of the composite service (see FIGS. 2 and 3, #203: p. 16, section entitled "Service nodes 203");

providing a subsidiary level, wherein said service nodes are expanded into method nodes for execution of specific operations inherent to a respective electronic service represented thereby (see FIGS. 2 and 3, #205, 205': p. 17 section entitled "Method nodes 205, 205'"); and

providing linking nodes in the top level for connecting said service nodes into a process flow, wherein said flow forms a hierarchical specification having a sequential series of said individual electronic services (see FIGS. 2 and 3: specification starting at p. 8, line 20).

Claim 33

A method of executing a given composite process, defined as including a plurality of individual electronic services registered on an electronic services platform, the method comprising:

segregating generic electronic services common to the given composite process from operations respectively inherent to each of said generic electronic services (specification starting at p. 16, line 1);

compiling a composite process flow using said generic electronic services (specification starting at p. 16, line 1); and

invoking each operations functionalities of each of said generic electronic services by expansion of each of said generic electronic services into said operations only as needed to continue said composite process (see pages 16 and 17, sections: "Service nodes 203" and "Flow of method invocations" and "Method nodes 205, 205'").

Claim 37

A computer tool for composing electronic service searching runtime criteria comprising:

computer code for structuring a plurality of service nodes, wherein each of said service nodes is representative of a generic service and includes only those criteria essential to invoking said service (see FIGS. 2 and 3, #203: p. 16, section entitled "Service nodes 203");

computer code for invoking a plurality of method nodes, wherein a set of method nodes is representative of operations inherent to an associated one of said service nodes (see FIGS. 2 and 3, #205, 205': p. 17 section entitled "Method nodes 205, 205'"); and

computer code for linking nodes sequencing said service nodes into a coherent flow representative of a composite service including more than one generic service (see FIGS. 2 and 3: specification starting at p. 8, line 20).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1 and 3 – 38 are rejected under 35 U.S.C. §102 as being anticipated by "eFlow: A Platform for Developing and Managing Composite E-Services" (hereafter Casati).

VII. ARGUMENT

Rejection of claims 1 and 3 – 38 is Improper

The rejection of claims 1 and 3 – 38 under 35 USC § 102 as being anticipated by Casati is improper. Appellant respectfully requests withdraw of this rejection.

The Arguments are separated into twelve different arguments and sub-headings representing the following claims: 1, 3, 10, 11, 23, 24, 28, 29, 33, and 37.

Law on 35 USC § 102

A proper rejection of a claim under 35 U.S.C. §102 requires that a single prior art reference disclose each element of the claim. See MPEP § 2131, also, *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983).. Since Casati neither teaches nor suggests each element in the pending claims, these claims are allowable over Casati.

1. Sub-Heading: (Claim 1)

Claim 1 recites recitations that are not taught in Casati. For example, claim 1 recites method nodes. Nowhere does Casati teach method nodes. In fact, Casati does not even mention method nodes.

The Office Action argues that FIG. 7 of Casati teaches method nodes:

> It is noted that the term "node" simply is only a label. In object-oriented programming, a method or method node is a common term and is a programmed procedure that is defined as part of a class and included in any object of that class. The execution of method is invoked at runtime as instantiation. **Clearly the process definition shown in FIG. 7 has means of method nodes**. (See Final OA at p. 3: Emphasis added by Appellant).

The arguments presented in the Office Action are contrary to the direct teachings in Casati itself. Casati discusses service nodes: "In the figures, basic services are

represented by rounded boxes in a light background" (p. 343). Thus, FIG. 7 of Casati shows a flow process with three service nodes: (1) Data Collection, (2) Furniture Moving Services, and (3) Billing. Nowhere does FIG. 7 teach method nodes. Claim 1 expressly recites both service nodes and method nodes. Casati does teach service nodes in FIG. 7, but does not teach method nodes.

Claim 1 recites additional recitations that are not taught in Casati. For example, claim 1 recites "wherein **each** of said method nodes is a representation of executable operations inherent to a consumer service represented by one of said service nodes. Even assuming arguendo that Casati teaches method nodes (which it does not), nowhere does Casati teach that **each** of the method nodes is a representation of executable operations inherent to a consumer service that is represented by one of the service nodes.

Appellant acknowledges that during patent examination claims must be given their broadest reasonable interpretation consistent with the specification (see MPEP §2111). Casati, however, does not teach both method and service nodes as recited in claim 1 when these terms are given their broadest reasonable interpretation consistent with Appellant's specification.

2. Sub-Heading: (Claim 3)

Claim 3 depends from claim 1. Thus, for at least the reasons given above in connection with claim 1, claim 3 is allowable over Casati.

Claim 3 recites additional recitations that are not taught in Casati. For example, claim 3 recites "**each** of said service nodes is **expandable into a second flow diagram** of method nodes" (emphasis added). The Office Action refers to FIGS. 4 and 7 of Casati. Applicants have reviewed these figures and all of Casati. Nowhere does Casati teach or suggest that **each** of the service nodes is expandable into a second flow diagram of method nodes.

Casati discusses service nodes: "In the figures, basic services are represented by rounded boxes in a light background" (p. 343). Thus, FIG. 7 of Casati shows a flow process with three service nodes: (1) Data Collection, (2) Furniture Moving Services, and (3) Billing. However, only the second service node (Furniture Moving Services) is expandable into a second flow diagram. By contrast, claim 1 recites a flow diagram

sequencing said service nodes as a representation of a process definition. Claim 3 further recites that **each** of the service nodes is expandable into a second flow diagram.

Under § 102, a reference must teach every element of a claim. Casati does not teach that each of the service nodes is expandable into a second flow diagram of method nodes. For at least this reason, Appellant respectfully requests allowance of claim 3.

3. Sub-Heading: (Claim 10)

Claim 10 depends from claim 1. Thus, for at least the reasons given above in connection with claim 1, claim 10 is allowable over Casati.

Claim 10 recites additional recitations that are not taught in Casati. For example, claim 10 recites that **each** of the service nodes comprises consumer and service **certification** properties. Nowhere does Casati teach a flow diagram sequencing service nodes and that each service node comprises consumer and service certification properties.

According to MPEP § 2111.01, the words of a claim must be given their plain meaning. Merriam-Webster is an online dictionary (www.merriam-webster.com) that provides the following definitions for the terms "certification" and "certify."

> **Certification**
> 1: the act of certifying : the sate of being certified
>
> **Certify** (including inflected forms certifying and certified)
> **1 :** to attest authoritatively: as **a :** conform **b :** to present in formal communication **c :** to attest as being true or as represented or as meeting a standard

Nowhere does Casati teach that each of the service nodes comprises consumer and service certification properties.

4. Sub-Heading: (Claim 11)

Claim 11 depends from claim 1. Thus, for at least the reasons given above in connection with claim 1, claim 11 is allowable over Casati.

Claim 11 recites additional recitations that are not taught in Casati. For example, claim 11 recites that **each** of the service nodes comprises service-level **exception** handling rules. Nowhere does Casati teach a flow diagram sequencing service nodes and that each service nodes comprises service-level exception handling rules.

The Office Action argues that this recitation is taught in Casati at page 435, left column, section 4.2, first paragraph. This section of Casati is reproduced below for convenience:

> In dynamic operational environments, service process definitions may need to be modified for some of the running instances. For example, we may need to manage errors or exceptional situations, deal with new laws or business policies, or simply to improve the process definition. eflow supports two types of dynamic changes.

This section of Casati teaches that service process definitions may need to be modified. "For example, we may need to manage errors or exceptional situations ...." Casati uses the word "exceptional" but this usage does not teach the recitations in claim 11. More specifically, claim 11 recites that **each** of the service nodes comprises service-level **exception** handling rules.

5. Sub-Heading: (Claim 23)

Claim 23 recites recitations that are not taught in Casati. For example, claim 23 recites "**each** of said service nodes is representative of a respective **service invocation setup phase** for **each** of the individual services" (emphasis added). Nowhere does Casati teach or suggest that each of the service nodes represents a respective service invocation setup phase for each of the individual services.

The Office Action refers to Section 4.1 and FIG. 7 of Casati for teaching this recitation. FIG. 7 of Casati shows a flow process with three service nodes: (1) Data Collection, (2) Furniture Moving Services, and (3) Billing. However, **only** the second service node (Furniture Moving Services) is expandable into a second flow diagram.

Casati, however, does not teach or suggest that **each** of the service nodes represents a service invocation setup phase for **each** of the individual services.

6. Sub-Heading: (Claim 24)

Claim 24 depends from claim 23. Thus, for at least the reasons given above in connection with claim 23, claim 24 is allowable over Casati.

Claim 24 recites additional recitations that are not taught in Casati. For example, claim 24 recites that the service nodes are expandable into method nodes. Nowhere does Casati teach method nodes. In fact, Casati does not even mention method nodes.

The Office Action argues that FIG. 7 of Casati teaches method nodes:

> It is noted that the term "node" simply is only a label. In object-oriented programming, a method or method node is a common term and is a programmed procedure that is defined as part of a class and included in any object of that class. The execution of method is invoked at runtime as instantiation. **Clearly the process definition shown in FIG. 7 has means of method nodes**. (See Final OA at p. 3: Emphasis added by Appellant).

The arguments presented in the Office Action are contrary to the direct teachings in Casati itself. Casati discusses service nodes: "In the figures, basic services are represented by rounded boxes in a light background" (p. 343). Thus, FIG. 7 of Casati shows a flow process with three service nodes: (1) Data Collection, (2) Furniture Moving Services, and (3) Billing. Nowhere does FIG. 7 teach method nodes. Claim 24 expressly recites both service nodes and method nodes. Casati does teach service nodes in FIG. 7, but does not teach method nodes.

Claim 24 recites additional recitations that are not taught in Casati. For example, claim 24 recites wherein the method nodes are representative of at least one respective operation inherent to a respective one of the individual services which is expanded thereto. Nowhere does Casati teach such a recitation. Further, the Office Action has not pointed to a location in Casati that teaches this recitation.

7. Sub-Heading: (Claim 28)

Claim 28 recites recitations that are not taught in Casati. For example, claim 28 recites "**each** of said service nodes is representative of a respective **service invocation setup phase** for **each** of the individual services" (emphasis added). Nowhere does Casati teach or suggest that each of the service nodes represents a respective service invocation setup phase for each of the individual services.

The Office Action refers to Section 4.1 and FIG. 7 of Casati for teaching this recitation. FIG. 7 illustrates three services: Data collection, Furniture Moving Services (generic node), and Billing. **Only one** of these nodes (i.e., Furniture Moving Services) is shown as a generic node. Casati does not teach or suggest that **each** of the service nodes represents a service invocation setup phase for **each** of the individual services.

Claim 28 recites additional recitations that are not taught in Casati. For example, claim 28 recites expanding **each** node of said **set** of the service nodes into method nodes. As noted in connection with FIG. 7, Casati teaches expanding only one service node. Casati does not mention expanding a set of service nodes.

Further, claim 28 recites both service and method nodes. Nowhere does Casati teach method nodes. In fact, Casati does not even mention method nodes.

The Office Action argues that FIG. 7 of Casati teaches method nodes:

> It is noted that the term "node" simply is only a label. In object-oriented programming, a method or method node is a common term and is a programmed procedure that is defined as part of a class and included in any object of that class. The execution of method is invoked at runtime as instantiation. **Clearly the process definition shown in FIG. 7 has means of method nodes.** (See Final OA at p. 3: Emphasis added by Appellant).

The arguments presented in the Office Action are contrary to the direct teachings in Casati itself. Casati discusses service nodes: "In the figures, basic services are represented by rounded boxes in a light background" (p. 343). Thus, FIG. 7 of Casati

shows a flow process with three service nodes: (1) Data Collection, (2) Furniture Moving Services, and (3) Billing. Nowhere does FIG. 7 teach method nodes. Claim 28 expressly recites both service nodes and method nodes. Casati does teach service nodes in FIG. 7, but does not teach method nodes.

Claim 28 recites additional recitations that are not taught in Casati. For example, claim 28 recites wherein each of said method nodes represent a plurality of inherent executable operations associated with a respectively associated one of the individual services. Nowhere does Casati teach this limitation. Further, the Office Action has not pointed to a location in Casati that teaches this limitation.

8. Sub-Heading: (Claim 29)

Claim 29 recites recitations that are not taught in Casati. For example, claim 29 recites a top level having service nodes and a subsidiary level wherein the "service nodes are expanded into method nodes ...." Nowhere does Casati teach or suggest this recitation. The Office Action contends the following:

> It is noted that the term "node" simply is only a label. In object-oriented programming, a method or method node is a common term and is a programmed procedure that is defined as part of a class and included in any object of that class. The execution of methods is invoked at runtime as instantiation.
>
> (See Final OA at p. 3)

Per MPEP 2111.01, the words of a claim must be given their "plain meaning" unless defined in the specification. The claim recitations are defined in Applicants' specification:

> Service nodes 203 define the service invocation setup phase (e.g., search for the best service provider, authenticate, and the like) and method nodes 205, 205' 205 define the interaction phase, invoking actual physical operations (e.g., delivering goods, receiving payments, and the like). Having two different levels 201, 207 and two different kinds of nodes 203, 205 provides a tool which simplifies the service composition effort since it allows the

> definition of a context--the service--in which interactions are performed.
>
> (See paragraph [0056] in US Application 20030028389 A1).

As another example, claim 29 recites four different nodes: service nodes, method nodes, linking nodes, and an event node. Applicants respectfully assert that the Office Action has not identified each of these four different nodes in Casati.

9. Sub-Heading: (Claim 30)

Claim 30 depends from claim 29. Thus, for at least the reasons given above in connection with claim 29, claim 30 is allowable over Casati.

Claim 30 recites additional recitations that are not taught in Casati. For example, claim 29 recites "providing event nodes." Per MPEP 2111.01, the words of a claim must be given their "plain meaning" unless defined in the specification. The term "event node" is provided with the following definition in Applicants' specification:

> an "event node" is generic for a predetermined system event such as "`WAIT` for customer cancellation;" an event node enables composite electronic-services to send and receive several types of notifications (in this example, if the operation receives a "cancel order" it thus leads to a process "complete" node.
>
> (See paragraph [0057] in US Application 20030028389 A1).

Nowhere does Casati teach or suggest "an event node" as this term is defined in Applicants' specification.

10. Sub-Heading: (Claim 33)

Claim 33 recites recitations that are not taught in Casati. For example, claim 33 recites invoking **each** operations functionalities of **each** of said generic electronic services by **expansion of each** of said generic electronic services into said operations **only as needed to continue said composite process**. Appellant respectfully submits that these recitations are not taught in Casati.

In Casati, FIG. 7 illustrates three services: Data collection, Furniture Moving Services (generic node), and Billing. **Only one** of these nodes (i.e., Furniture Moving Services) is shown as a being expandable. Casati does not teach or suggest invoking operations of each of the generic services by expanding each of the generic services.

Further, the claim recites that each of the generic services are expanded only as needed to continue the composite process. Nowhere does Casati teach or suggest such a recitation.

11. Sub-Heading: (Claim 34)

Claim 34 depends from claim 33. Thus, for at least the reasons given above in connection with claim 33, claim 34 is allowable over Casati.

Claim 34 recites recitations that are not taught in Casati. For example, claim 34 recites "**compiling** a plurality of the individual electronic services as associated **with a search for data** associated with said given composite process having at least one requirement from each of said individual generic electronic services" (emphasis added). Nowhere does Casati teach or suggest this recitation.

The Office Action cites Section 1 "value-added service" for teaching this recitation. Appellant respectfully disagrees. Appellant has reviewed this section. Nowhere does this section (or any section of Casati) teach compiling electronic services as associated with a search for data ... as recited in claim 34.

12. Sub-Heading: (Claim 37)

Claim 37 recites recitations that are not taught in Casati. For example, claim 37 recites "a **plurality** of service nodes, wherein **each** of said service nodes is representative of a generic service" (emphasis added). Further, the claim recites linking nodes ... including **more than one generic service**" (emphasis added). Nowhere does Casati teach or suggest a plurality of service nodes wherein each of the service nodes is representative of a generic service.

The Office Action refers to Section 4.1 and FIG. 7 of Casati for teaching these recitations. FIG. 7 illustrates three services: Data collection, Furniture Moving Services

(generic node), and Billing. **Only one** of these nodes (i.e., Furniture Moving Services) is shown as a generic node. Thus, the recited limitation is not shown.

Further, claim 37 recites three different nodes: method nodes, service nodes, and linking nodes. Casati does not teach a computer tool for composing electronic service searching runtime criteria having three different nodes.

Further, nowhere does Casati teach method nodes. In fact, Casati does not even mention method nodes.

The Office Action argues that FIG. 7 of Casati teaches method nodes:

> It is noted that the term "node" simply is only a label. In object-oriented programming, a method or method node is a common term and is a programmed procedure that is defined as part of a class and included in any object of that class. The execution of method is invoked at runtime as instantiation. **Clearly the process definition shown in FIG. 7 has means of method nodes**. (See Final OA at p. 3: Emphasis added by Appellant).

The arguments presented in the Office Action are contrary to the direct teachings in Casati itself. Casati discusses service nodes: "In the figures, basic services are represented by rounded boxes in a light background" (p. 343). Thus, FIG. 7 of Casati shows a flow process with three service nodes: (1) Data Collection, (2) Furniture Moving Services, and (3) Billing. Nowhere does FIG. 7 teach method nodes. Claim 37 expressly recites both service nodes and method nodes. Casati does teach service nodes in FIG. 7, but does not teach method nodes.

CONCLUSION

In view of the above, Appellant respectfully requests the Board of Appeals to reverse the Examiner's rejection of all pending claims.

Any inquiry regarding this Amendment and Response should be directed to Philip S. Lyren at Telephone No. (281) 514-8236, Facsimile No. (281) 514-8332. In addition, all correspondence should continue to be directed to the following address:

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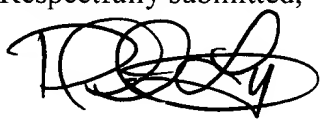
Respectfully submitted,



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CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 9th day of May, 2005.

By Be Henry
Name: Be Henry

VIII. Claims Appendix

1. A model for compiling a specification of a process definition comprising:

service nodes, wherein each of said service nodes is a representation of a consumer service;

a first flow diagram sequencing said service nodes as a representation of the process definition; and

method nodes, wherein each of said method nodes is a representation of executable operations inherent to a consumer service represented by one of said service nodes.

2. (canceled)

3. The model as set forth in claim 1 further comprising:

wherein each of said service nodes is expandable into a second flow diagram of method nodes.

4. The model as set forth in claim 1 wherein each of said service nodes is executed by accessing an electronic service registered on an electronic service platform.

5. The model as set forth in claim 1 wherein each of said service nodes comprises:

consumer service-level properties.

6. The model as set forth in claim 5 wherein said consumer service-level properties comprises:

a service search recipe or service selection rule.

7. The model as set forth in claim 5 wherein said consumer service-level properties comprises:

a service reuse.

8. The model as set forth in claim 5 wherein said consumer service-level properties comprises:

a service-inherent method flow.

9. The model as set forth in claim 1 wherein each of said service nodes comprises:

consumer authentication properties.

10. The model as set forth in claim 1 wherein each of said service nodes comprises:

consumer and service certification properties.

11. The model as set forth in claim 1 wherein each of said service nodes comprises:

service-level exception handling rules.

12. The model as set forth in claim 1 wherein each of said service nodes comprises:

the definition of interaction flow, defining how the interaction with the service is conducted.

13. The model as set forth in claim 1 wherein each of said method nodes comprises:

representations of a service operation including operations executed within the context of at least one of said service nodes registered with a electronic services platform.

14. The model as set forth in claim 13 each of said method nodes further comprises:

the service operation to call.

15. The model as set forth in claim 13 each of said method nodes further comprises:

invocations for a specific operation of the method node.

16. The model as set forth in claim 13 each of said method nodes further comprises:

input data, including formatting and handling specifications.

17. The model as set forth in claim 13 each of said method nodes further comprises:

output data, including formatting and handling specifications.

18. The model as set forth in claim 13 each of said method nodes further comprises:

method-level exception handling rules.

19. The model as set forth in claim 1 wherein said specification is a composition of individual electronic services.

20. The model as set forth in claim 1 applied in a distributed computer network environment.

21. The model as set forth in claim 1 wherein said process is a workflow.

22. The model as set forth in claim 1 wherein said process is a composite electronic service.

23. A computer tool for compiling a specification of a process comprising:

computer code for representing a plurality of individual services as service nodes, wherein each of said service nodes is representative of a respective service invocation setup phase for each of the individual services; and

computer code for compiling a set of the service nodes into a composite service forming a generically defined flow for said process.

24. The computer tool as set forth in claim 23 comprising:

said service nodes are expandable into method nodes, wherein method nodes are representative of at least one respective operation inherent to a respective one of the individual services which is expanded thereto.

25. The computer tool as set forth in claim 24 comprising:

said method nodes represent a plurality of inherent executable operations associated with a respectively associated one of the individual services.

26. The computer tool as set forth in claim 23 comprising:

each said service nodes provides executable functions related to setting up communication with each of said individual services.

27. The computer tool as set forth in claim 23 comprising:

the composite service is a service node flow specifying generic functionalities common to said process.

28. A computer tool for compiling a specification of a process and executing the specification of the process comprising:

computer code for representing a plurality of individual services as service nodes, wherein each of said service nodes is representative of a respective service invocation setup phase for each of the individual services;

computer code for compiling a set of the service nodes into a composite service forming a generically defined flow of said process;

computer code for executing the specification of the process represented by the generically defined flow by expanding each node of said set of the service nodes into method nodes, invoking functionalities of the individual services thereby, wherein each of said method nodes represent a plurality of inherent executable operations associated with a respectively associated one of the individual services.

29. A method for structuring individual electronic services registered on an electronic service platform, the method comprising:

providing a top level having service nodes representative of extracted common elements of the composite service;

providing a subsidiary level, wherein said service nodes are expanded into method nodes for execution of specific operations inherent to a respective electronic service represented thereby; and

providing linking nodes in the top level for connecting said service nodes into a process flow, wherein said flow forms a hierarchical specification having a sequential series of said individual electronic services.

30. The method as set forth in claim 29 further comprising:

providing event nodes.

31. The method as set forth in claim 30 in an internet environment.

32. The method as set forth in claim 31 further comprising:

executing a process for providing electronic services over the internet environment by executing the hierarchical specification.

33. A method of executing a given composite process, defined as including a plurality of individual electronic services registered on an electronic services platform, the method comprising:

segregating generic electronic services common to the given composite process from operations respectively inherent to each of said generic electronic services;

compiling a composite process flow using said generic electronic services; and

invoking each operations functionalities of each of said generic electronic services by expansion of each of said generic electronic services into said operations only as needed to continue said composite process.

34. The method as set forth in claim 33, said compiling further comprising:

compiling a plurality of the individual electronic services as associated with a search for data associated with said given composite process having at least one requirement from each of said individual generic electronic services.

35. The method as set forth in claim 33, said compiling further comprising:

compiling a composite process definition as a sequential series of service nodes, wherein each said service node is a specification related to invoking communications

with a specific one of said service nodes.

36. The method as set forth in claim 35 said executing further comprising:

including method nodes for each of said service nodes wherein said method nodes are invocations of operations inherent with an associated one of the generic electronic services.

37. A computer tool for composing electronic service searching runtime criteria comprising:

computer code for structuring a plurality of service nodes, wherein each of said service nodes is representative of a generic service and includes only those criteria essential to invoking said service;

computer code for invoking a plurality of method nodes, wherein a set of method nodes is representative of operations inherent to an associated one of said service nodes; and

computer code for linking nodes sequencing said service nodes into a coherent flow representative of a composite service including more than one generic service.

38. The tool as set forth in claim 37 comprising;

computer code for handing event nodes.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.

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PATENT APPLICATION

ATTORNEY DOCKET NO. 10008270 -1

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Fabio Casati et al

Confirmation No.: 3418

Application No.: 09/911980

Examiner: Ted T. Vo

Filing Date: Jul 24, 2001

Group Art Unit: 2122

Title: Modeling Tool For Electronic Services And Associated Methods

Mail Stop Appeal Brief-Patents
Commissioner For Patents
PO Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Sir:

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on **March 7, 2005**.

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) $500.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

( ) (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d) for the total number of months checked below:

( )	one month	$120.00
( )	two months	$450.00
( )	three months	$1020.00
( )	four months	$1590.00

( ) The extension fee has already been filled in this application.

( ) (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account **08-2025** the sum of **$500.00**. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

(X) I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450. Date of Deposit: **May 9, 2005**

OR

( ) I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number_____ on _____

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Signature: Be Henry

Respectfully submitted,

Fabio Casati et al

By _____

Philip Lyren

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Date: **May 9, 2005**

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